How are revenue systems becoming more comprehensive – from payments to accounting and management, through to revenue integrity and fraud prevention? Henry Canaday investigates.

Airline costs have been slashed to the bone and capacity adjusted. New aeroplanes are coming, right-sized for routes and stingy with precious fuel. But how do airlines wring the most revenue out of their flying?

That is partly a question of pricing, ancillary sales, allocating seats, distributing capacity efficiently and making sure earned revenue is not lost to fraudulent credit cards or tricky agents. New systems are making all these distribution functions a lot more effective.

Firms like Amadeus handle all or almost all of the distribution challenge. New pricing approaches are one major innovation. "The industry is moving to true dynamic pricing, not just dynamic valuation of each offer against a price," emphasises Umit Cholak, Amadeus's director of revenue management and inventory product management. True dynamic pricing will estimate the maximum fare each customer is willing to pay in real time.

GUESTLOGIX

Wringing
the most
out of flying

▮ PRICING CHALLENGES

"In the past, airlines set and filed prices, and then allocated inventory," Cholak explains. "They pushed prices out to users on many channels, but prices on all channels were the same." But with dynamic pricing, users will pull prices. And prices on different channels will be different, unless all channels use the same rules and pricing engine.

This will be very hard to do, with look-to-book ratios running high. Uniform pricing under the crush of all this volume will bring huge challenges in scalability and response time.

Amadeus wants to build that single pricing engine that keeps fares uniform on all channels under dynamic pricing. It has invested $2.5 billion in infrastructure to enable fast response at higher scales. Dynamic pricing has already started for groups, which are relatively easy to handle, and Cholak expects it to start for individuals in 2014 or 2015.

The Amadeus exec argues that broad capabilities also make the company's revenue management tools more accurate. "The quality of revenue management is influenced by the quality of data. We are a CRS and a GDS. We have revenue accounting and integrity, and handle partnerships and codeshares. We can use all this data to improve revenue management."

Amadeus revenue integrity checks efforts by agents to defraud airlines by adding and cancelling bookings to exploit gaps in airline information systems. Unchecked, agents can violate married segment or origin-and-destination (O&D) control rules. "We look at the final set of legs booked and spot the violation," Cholak explains. "We can automatically cancel some and hold others for review by analysts."

Now serving nearly 40 airlines, Revenue Management Systems (RMS) offers two products, airRM and airRMexpress for smaller airlines. Ryanair, flydubai, GoAir, →

flydubai is one of almost 40 airlines using applications from Revenue Management Systems.

Jetstar, AirAsia, Peach and Scoot are among RMS's customers.

RMS has begun to incorporate ancillary data in revenue management so users can see data on ancillary sales at flight, fare class and other levels. Chief operating officer Eric Nordling says the next step is to develop forecast and optimisation algorithms so total airline revenue, not just fares, can be maximised.

The company is expanding and enhancing its forecasting and optimisation tools generally. Mature small airlines now see less erratic demand patterns so they can exploit traditional optimisation tools. Other airlines want revenue management tailored for optimisation in stable markets, but with low-fare tools for more volatile markets. So RMS has developed tools that can suit either stable or low-fare markets.

■ TARGETED ADVERTISING

RMS has partnered with Sociomantic to link revenue with internet advertising. The partnership combines detailed data on demand for each flight from airRM with Sociomantic's ability to instantly create internet advertising targeted at people most likely to buy seats on particular flights. And it reports how much revenue is generated for each dollar of ad spending.

RMS tools quickly highlight flights that require analyst attention and have excellent reporting tools. The airRM system allows analysts to see all flights, focus on those that need adjustment and then make inventory changes on hundreds of flights with the click of a button.

GuestLogix currently serves about 60 travel firms, mostly airlines such as Spring Airlines, Wideroe, flydubai and Sun Country, says its executive vice-president global sales, Ilia Kostov. The company now enables flight attendants to sell ancillary products on purpose-built devices or multipurpose devices such as tablet PCs, which attendants can also use for manuals, passenger data and other applications.

"GuestLogix provides software, back-office systems and reconciliation, everything you need to do retail," Kostov summarises. In addition to its solution for flight attendants, the firm now enables onboard sales via seatback IFE systems or passengers' Wi-Fi devices. "It's multi-channel, so you do not have to wait until the attendant passes by."

Among other capabilities, Ypsilon.net prevents fraud by credit card or other payment methods. "We are a unique hybrid of content aggregator and IT provider of booking engines on the one hand and, on the other, a payment gateway and service provider that has developed fraud management for the travel industry, rather than coming from retail like other fraud prevention companies," summarises Patrick Coulomb, vice-president sales and marketing.

Ypsilon uses all available data on a booking to score fraud likelihood and then automatically puts suspect bookings in a queue. Coulomb says other firms cannot do this intelligent automatic sorting. "They reject some good bookings." Most fraud prevention tools developed in retail block out whole countries, thus losing valid sales. Others request data from airlines, raising privacy issues. Ypsilon pulls rich booking data from its own distribution system.

Once a score for fraud potential is calculated, it is inserted in the PNR for an agent to check, but not necessarily cancel, the booking. Ypsilon has sold fraud prevention tools to several online travel agencies, and five legacy carriers are considering them. Coulomb expects three to sign up soon.

SafetyPay's online payment solution allows customers to pay from a bank account in their local currency with zero fraud and zero charge-backs, explains vice-president of sales Sandra Feinberg. She estimates that credit card fraud can range up to 2%, and SafetyPay's use of local currency ensures that customers will not encounter additional fees.

"It's very simple. You pay out of your bank account, you do not have to provide financial information, there is no pre-registration, credit or debit card," Feinberg explains. The key to all this ease is that the service has already integrated directly with banks' online platforms, or indirectly through other firms that have integrated with banks.

SafetyPay is now used by Volaris, Peruvian Airlines, Avianca, the major online travel agency in Latin America and many others. Unlike some similar solutions, it can be used in different regions. Feinberg expects that some major global airlines will sign up in early 2014.

■ WELL CONNECTED

SafetyPay has direct links with most of the banks in several Latin American countries, including Mexico, Peru, Colombia and Brazil, and links through partners with banks in Germany and the Netherlands. The firm plans to link with more banks elsewhere, including the US, where it now allows customers to book online and then pay at Walmart or CVS in cash.

Fees are simple discounts per transaction. And getting on board is easy. SafetyPay is already integrated with Adyen, WorldPay, GlobalCollect and UATP, and is working on integration with the major GDSs.

Adyen provides payment solutions for IT suppliers such as Amadeus and Navitaire, and 15 airlines such as Monarch, Transavia and LAN.

Marketer Delphine Bos says the company helps boost the portion of online shoppers that actually complete transactions, while lowering airline costs. Its innovations include dynamic payment switching, dynamic 3D Secure, split payouts of ancillary revenue, mobile payments, payments at the point ➔

of sale and over 220 alternative forms of online payment.

Dynamic payment switching enables airlines to switch online credit card sales between card acquirers, the institutions that accept and process cards. This routes transactions to the acquirer that charges the lowest fees, authorises most frequently, and is online so there is no loss of time or business.

Dynamic 3D Secure gives airlines an additional security layer to authenticate card holders online, selectively by market so that conversion rates are maximised. For example, using 3D Secure may decrease conversion in the US but boost it in India.

Launched in 2010, eNett's Virtual Account Numbers (VANs) are automatically generated MasterCard numbers that can be used by agents to pay airlines. VANs protect agents against airline default and fraud, and offer real-time reconciliation. In return, airlines get instant guaranteed payments.

The company recently completed integration with Travelport and is now extending VANs to agents of all sizes, says eNett's head of marketing, Marijke Timmers. It has also partnered with several low-fare airlines to provide a payment solution for agencies and a tool to facilitate frequent flyer payments. VANs support easyJet's recent partnership with a major airline, enabling the major's frequent flyers to use their miles to book easyJet flights while VANs provide seamless payment to easyJet.

Timmers believes VANs are ideal for LFAs that want to tap agencies while avoiding the risk of agent default. They provide access to all travel agents in a market, maximise sales at a low cost with no risk and offer immediate payment. And VANs are easy to implement for any airline that accepts MasterCard.

Portugal's TAP recently extended its contract with Accelya Kale Solutions for ticket-auditing services, including PNR audits and revalidation audits.

■ SOPHISTICATED APPROACH

Accelya Kale's senior marketer, Amit Nagarseker, says low-fare carriers are now moving to hybrid models to increase revenue and thus will need more sophisticated revenue accounting. "They will have to forge partnerships with other airlines, alliances and industry bodies such as IATA, adhere to industry standards such as BSP, expand their sales channels to GDSs, and embrace interlining and codesharing. Without a robust accounting system, they could lose a lot of revenue through leakages or face compliance issues with their partners."

Accelya Kale provides revenue accounting, miscellaneous billing, credit card management, auditing, cost management and business intelligence solutions. More than 200 airlines use its solutions, and the firm partners with IATA on initiatives like BSP processing, BSPlink, Neutral Fare Proration and Simplified Interline Settlement.

The company's integrated financial solutions will meet the needs of small or simple airlines as they grow big and complex, Nagarseker says. "And Accelya Kale's innovative pay-per-use engagement model will help reduce capital costs without compromising performance."

Sharjah-based Information Systems Associates has been developing technology solutions for travel and aviation since 2005, according to chief executive officer Nader Shukralla. The firm's revenue-side solutions include its AccelAero reservations system, its AeroPort departure control system and its MaxAero revenue management suite. ISA solutions are now used by more than 25 airlines, including the Air Arabia Group, Mahan Air, Kam Air, Jubba Airways and Daallo Airlines.

MaxAero helps airlines forecast future demand for both segment and O&D optimisation. Its functions include revenue planning and budgeting, forecasting and decision support, revenue optimisation and revenue integrity. Shukralla says it uses artificial intelligence, robotics, statistics and data mining.

Hitit Computer Services has served airlines for almost 20 years, says senior manager Esad Taha Cakici. Its products include Crane PAX, a passenger services system which handles airline–traveller interactions, ancillary products, direct distribution and maintaining a single robust inventory. PAX provides direct distribution channels, including internet booking, mobile channels and agency platforms. The application enables airlines to sell hotels, car rentals, destination events and other ancillaries within the booking process and at other touchpoints. In addition, Hitit has expertise in loyalty and customer relationship management systems.

"We try to improve revenue management with a single robust inventory," Cakici stresses. "Multiple inventories decrease revenue management effectiveness." Yet many airlines, seeking quick distribution solutions, still develop multiple inventories.

With all these tools for revenue handling, airlines are now in a position to ensure this part of their business is fully controlled. ■

The Air Arabia Group, which has just celebrated 10 years with this special livery, is one of more than 25 airlines utilising tools from Information Systems Associates.